

What is claimed is:

1 1. A hollow core composite assembly, comprising:
2 a hollow core base including at least one open core surface; and
3 at least one solid film applied to said at least one open core
4 surface.

1 2. A hollow core composite assembly as described in claim
2 1, further comprising:

3 at least one adhesive layer positioned between said at least one
4 solid film and said at least one open core surface.

1 3. A hollow core composite assembly as described in claim
2 2, further comprising:

3 at least one dry face ply laid up dry and placed on said at least
4 one solid film; and

5 a liquid resin applied to said at least one dry face ply and then
6 cured.

1 4. A hollow core composite assembly as described in claim
2 3, wherein said at least one dry face ply includes a plurality of dry face plies.

1 5. A hollow core composite assembly as described in claim
2 1, wherein said hollow core base is a honeycomb core.

1 6. A hollow core composite assembly as described in claim
2 1, wherein said liquid resin is applied to said at least one dry face ply using
3 resin transfer molding.

1 7. A hollow core composite assembly as described in claim
2 1, wherein said liquid resin is applied to said at least one dry face ply using
3 vacuum assisted resin transfer molding.

1 8. A hollow core composite assembly as described in claim
2, wherein said liquid resin is applied to said at least one dry face ply using
3 vacuum assisted resin infusion.

1 9. A hollow core composite assembly as described in claim
2, wherein said at least one adhesive layer is an uncured adhesive film.

1 10. A hollow core composite assembly, comprising:
2 a hollow core base including at least one open core surface;
3 at least one solid film applied to said at least one open core
4 surface; and

5 at least one adhesive layer positioned between said at least one
6 solid film and said at least one open core surface.

1 11. A hollow core composite assembly as described in claim
2, further comprising:

3 at least one dry face ply laid up dry and placed on said at least
4 one solid film; and
5 a liquid resin applied to said at least one dry face ply and then
6 cured.

1 12. A hollow core composite assembly as described in claim
2, wherein said at least one dry face ply includes a plurality of dry face plies.
3

1 13. A hollow core composite assembly as described in claim
2, wherein said hollow core base is a honeycomb core.

1 14. A hollow core composite assembly as described in claim
2, wherein said liquid resin is applied to said plurality of dry face plies using
3 resin transfer molding.

1 15. A hollow core composite assembly as described in claim
2 11, wherein said liquid resin is applied to said plurality of dry face plies using
3 vacuum assisted resin transfer molding.

1 16. A hollow core composite assembly as described in claim 11,
2 wherein said at least one adhesive layer is an uncured adhesive film.

1 17. A method of producing a hollow core composite
2 assembly comprising:

3 applying a film adhesive to an open core surface of a hollow core
4 base; and

5 applying a solid film to said open core surface.

1 18. A method of producing a hollow core composite
2 assembly as described in claim 17, further comprising:

3 laying up dry at least one dry face ply on top of the solid film;

4 applying liquid resin to said at least one dry face ply; and

5 curing the hollow core composite assembly.

1 19. A method of producing a hollow core composite
2 assembly as described in claim 18, further comprising:

3 curing said solid film to said open core surface by said applying
4 liquid resin.

1 20. A method of producing a hollow core composite
2 assembly as described in claim 18 further comprising:

3 pre-curing said solid film to said open core surface.

1 21. A method of producing a hollow core composite
2 assembly as described in claim 17, wherein said applying liquid resin is
3 accomplished utilizing a resin transfer molding process.

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1 22. A method of producing a hollow core composite
2 assembly as described in claim 17, wherein said applying liquid resin is
3 accomplished utilizing a vacuum assisted resin transfer molding process.